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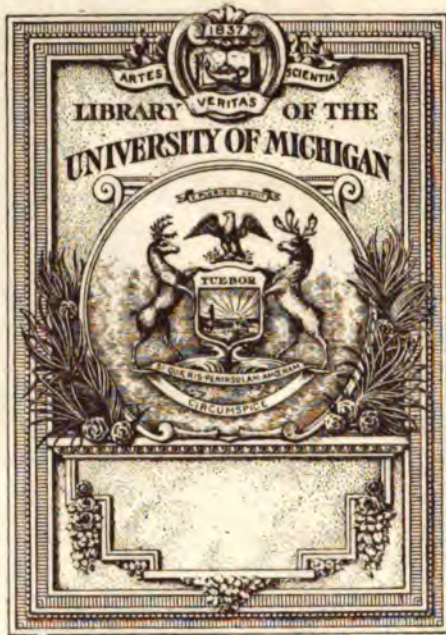
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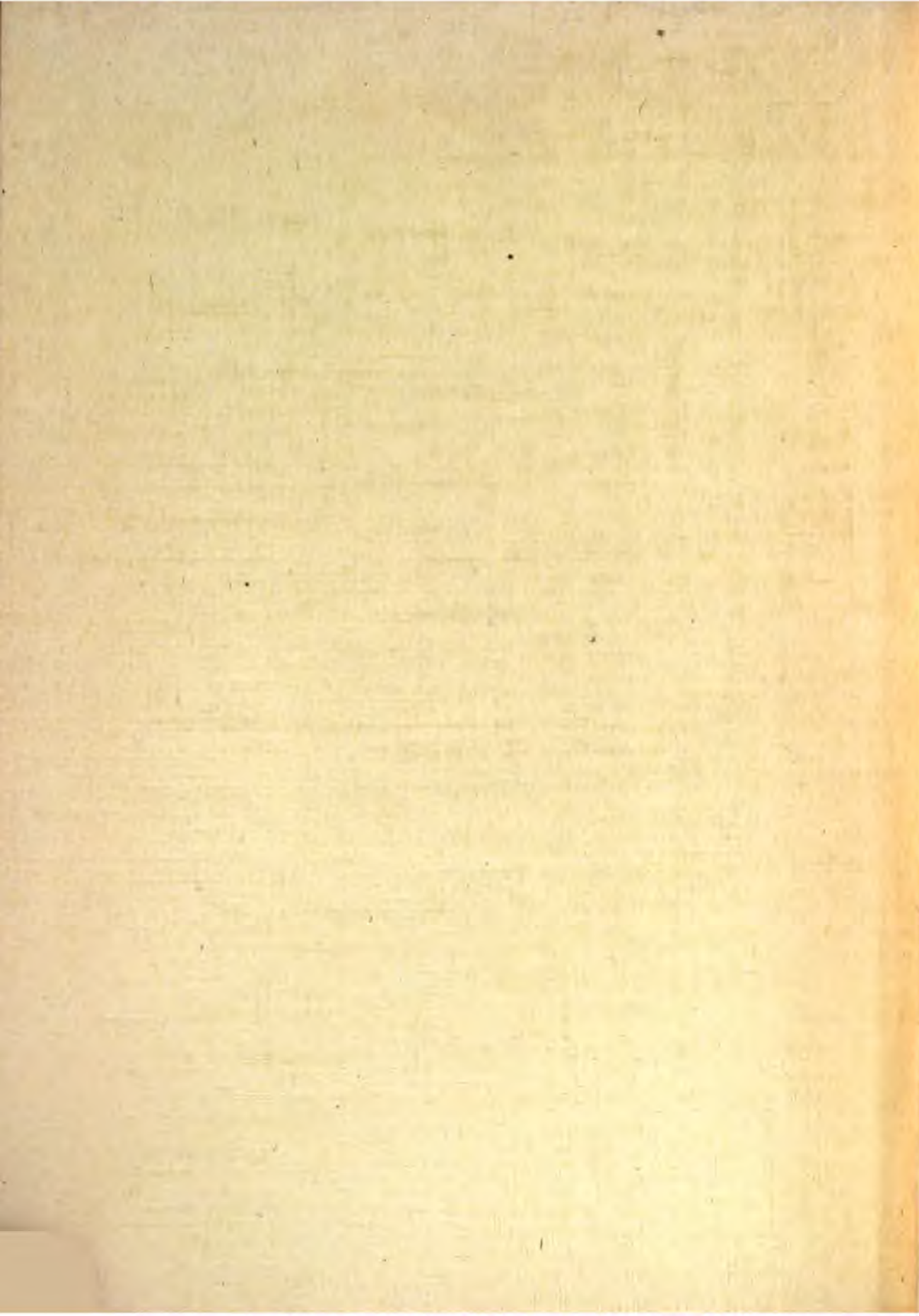


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12. **Soret, J. L.** Recherches sur l'absorption des rayons ultra-violets par diverses substances. (Comptes rendus, Paris, v. 86, March 18, 1878, p. 708-711; April 29, 1878, p. 1062-1064.) * EO
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122. **Grant, Kenneth C.** Sterilization of polluted water by ultra-violet rays. (Engineering news, New York, v. 64, Sept. 15, 1910, p. 275.) **VDA**
Describes experiments in progress in the laboratory of the Sorbonne, at Paris.
123. **Henri, Victor, and others.** Apparatus for destroying bacteria in water supply systems. (English patent, 1910, no. 25,882.) **Patent Room**
124. — Apparatus for sterilizing liquids by ultra-violet rays. (English patent, 1910, no. 23,077.) **Patent Room**
125. — Apparatus for treating liquids with ultra-violet rays. (English patent, 1910, no. 12,948.) **Patent Room**
126. — Apparatus for the treatment of liquids by means of ultra-violet rays. (English patent, 1910, no. 12,947.) **Patent Room**
127. — Apparatus for treating liquids by ultra-violet rays. (English patent, 1910, no. 18,458.) **Patent Room**
128. — Apparatus for treating liquids by means of ultra-violet rays. (English patent, 1910, no. 18,768.) **Patent Room**
129. — Nouvelles recherches sur la stérilisation de grandes quantités d'eau par les rayons ultraviolets. (Comptes rendus, Paris, v. 151, Oct. 17, 1910, p. 677-680.) ***EO**
130. — Perfectionnement aux appareils pour la stérilisation des liquides. (French patent, 1910, no. 424,369.) **Patent Room**
131. — Sterilization of liquids. (English patent, 1910, no. 14,129.) **Patent Room**
132. — Sterilization of liquids by ultra-violet rays. (English patent, 1910, no. 25,883.) **Patent Room**
133. **Henri-Cernovodeanu, Mme. V.** Action des rayons ultraviolets sur les bacilles tuberculeux et sur la tuberculine. (Comptes rendus, Paris, v. 151, Oct. 24, 1910, p. 724-726.) ***EO**
134. **Leblanc, Maurice, the younger.** La lampe en quartz, à vapeur de mercure. (Lumière électrique, Paris, série 2, tome 12, Nov. 5, 1910, p. 163-169.) **††VGA**
Historical characteristics of the new lamp.
135. — Mercury-vapor quartz lamps. (Electrical review and western electrician, Chicago, v. 57, Dec. 17, 1910, p. 1248-1250.) **VGA**
Describes luminous efficiency of the quartz lamp.
136. **Lehmann, H.** Über ein Filter für ultraviolette Strahlen und seine Anwendung. (Chemiker-Zeitung, Cöthen, v. 34, Sept. 29, 1910, p. 1032.) **VOA**
137. — — (Physikalische Zeitschrift, Leipzig, v. 11, Nov. 15, 1910, p. 1039-1047.) **PAA**
138. **Lombard, Maurice.** Sur les effets chimiques et biologiques des rayons ultraviolets. (Comptes rendus, Paris, v. 150, Jan. 24, 1910, p. 227-229.) ***EO**
139. **Maurain, and WARCOLLIER.** Action des rayons ultraviolets sur le vin en fermentation. (Comptes rendus, Paris, v. 150, Feb. 7, 1910, p. 343-344.) ***EO**
140. **Miller, Warren H.** Quartz tube mercury-vapor lamps. (Electrical world, New York, v. 55, March 17, 1910, p. 691-692.) **VGA**
141. **Nogier, Thomas.** Appareil de stérilisation urbaine des eaux potables par les rayons ultra-violets. (French patent, 1910, no. 426,606.) **Patent Room**
142. **Otto, M. P.** Appareil pour la stérilisation des eaux par les rayons ultraviolets. (French patent, 1910, no. 421,296.) **Patent Room**
143. **Pougnnet, Jean.** Action des rayons ultraviolets sur les plantes à coumarine et quelques plantes dont l'odeur provient de glucosides dédoublés. (Comptes rendus, Paris, v. 151, Sept. 19, 1910, p. 566-569.) ***EO**
144. Practical sterilization by means of ultra-violet rays. (Scientific American, New York, v. 102, May 21, 1910, p. 427.) **††VA**
145. Quartz lamps in photography. (Electrical review and western electrician, Chicago, v. 57, Nov. 12, 1910, p. 971.) **VGA**

1910, *continued*.

146. **Recklinghausen, Max.** Sterilization of water by means of quartz lamps. (Electrical review, London, v. 67, Sept. 2, 1910, p. 378-379.) **VGA**

147. **Sensitiveness** of different eyes to ultra-violet light. (Illuminating engineer, London, v. 3, Sept., 1910, p. 559-560.) **VOKA**

148. **Steinmetz, C. P.** The physiological effect of radiation. (Illuminating engineer, London, v. 3, Feb., 1910, p. 93-96.) **VOKA**

149. **Sterilisation** von Trinkwasser mit ultravioletten Strahlen. (Wasser und Abwasser, Leipzig, v. 3, Oct. 22, 1910, p. 239.) **VDL**

150. **Sterilization** by ultra-violet light. (Electrical review and western electrician, Chicago, v. 56, March 12, 1910, p. 535-536.) **VGA**

Describes various methods as tested, giving time of exposure of liquids with various currents.

151. **Sterilization** by ultra-violet rays. (Electrical review and western electrician, Chicago, v. 57, Nov. 12, 1910, p. 1001.) **VGA**

Describes the "Nogier" and "Silica" sterilizers.

152. **Stockhausen, Karl.** Glare, its causes and effects. (Illuminating engineer, London, v. 3, March, 1910, p. 181-182.) **VOKA**

153. **Systematische** Untersuchungen über die Wirksamkeit der verschiedenen ultravioletten Strahlen der Quecksilberdampf-Quartzmantel-Bogenlampe. (Electrotechnik und Maschinenbau, Wien, v. 28, Aug. 7, 1910, p. 669-671.) **VGA**

A review of investigations at the physiological laboratory of the Sorbonne of the bactericidal effects of these rays.

154. **Urbain, E., and A. FEIGE.** Stérilisation des grandes masses d'eau par l'ultra-violet. (Comptes rendus, Paris, v. 151, Oct. 31, 1910, p. 770-772.) ***EO**

155. **Urbain, E., and CL. SCAL.** Sur la stérilisation de l'eau par l'ultra-violet. (Comptes rendus, Paris, v. 150, Feb. 28, 1910, p. 548-549.) ***EO**

156. **Urbain, E., and others.** Employment of metals in the electric arc for the sterilization of liquids. (English patent, 1910, no. 4795.) **Patent Room**

Describes the use of a metal in the arc for the purpose of extending the spectrum farther into the violet than that of mercury.

157. **Vandevelde, A. J. J.** Über das Sterilisieren von Mehl und die Brötgarung. (Chemiker-Zeitung, Cöthen, v. 34, Oct. 6, 1910, p. 1061.) **VOA**

158. **Wartenberg, H.** Über die Ultravioletabsorption des Sauerstoffes. (Physikalische Zeitschrift, Leipzig, v. 11, Dec. 1, 1910, p. 1168-1172.) **PAA**

159. **Zimmerman, J. D.** Quartz tube mercury-arc lamp. (Electrical review and western electrician, Chicago, v. 57, Sept. 10, 1910, p. 523-525.) **VGA**

Detailed description of the lamp, giving its performance curve and candlepower distribution curve.

1911

160. **Agulhon, H.** Action des rayons ultra-violetts sur les diastases. (Comptes rendus, Paris, v. 152, Feb. 13, 1911, p. 398-401.) ***EO**

161. **Banque du Radium.** Apparatus for sterilizing liquids by means of ultra-violet rays. (English patent, 1911, no. 15,010.) **Patent Room**

162. **Bell, Louis.** On the opacity of certain glasses for the ultra-violet. (Proceedings, American Academy of Arts and Sciences, Boston, v. 46, April, 1911, p. 669.) ***EA**

163. **Berthelot, Daniel.** Les rayons ultra-violetts et leurs applications pratiques. (Société des ingénieurs civils de France, Mémoires et compte rendu des travaux, Paris, année 64, Dec., 1911, p. 859-951.) **VDA**

Lengthy discussion of the characteristics of the rays and their use in lighting, medicine, and water purification.

164. **Berthelot, Daniel, and HENRY GAUDECHON.** Action comparée des rayons ultra-violetts sur les composés organiques à structure cyclique. Étude des sels minéraux en solution aqueuse. (Comptes rendus, Paris, v. 152, Feb. 13, 1911, p. 376-378.) ***EO**

165. — La nitrification par les rayons ultraviolets. (Comptes rendus, Paris, v. 152, Feb. 27, 1911, p. 522-524.) ***EO**

166. **Bierry, Henri.** Action des rayons ultraviolets sur le saccharose. (Comptes rendus, Paris, v. 152, June 6, 1911, p. 1629-1632.) ***EO**

167. **Bierry, Henri, and others.** Action des rayons ultraviolets sur la glycérine. (Comptes rendus, Paris, v. 152, Feb. 27, 1911, p. 535-536.) ***EO**

Abstract in Journal of the Society of Chemical Industry, London, v. 30, 1911, p. 386, *VOA*.

168. **Black, Nelson Miles.** Artificial illumination as a factor in the production of ocular discomfort. (Illuminating Engineering Society, Transactions, New York, v. 6, March, 1911, p. 166-177.) **VOKA**

169. **Bujwid, Odo.** Über die Einwirkung der ultravioletten Strahlen auf Bakterien. (Journal für Gasbeleuchtung und Wasserversorgung, München, v. 54, Sept. 2, 1911, p. 853-858.) **VOA**

170. — — (Chemiker-Zeitung, Cöthen, v. 35, July 22, 1911, p. 806-807.) **VOA**

1911, continued.

171. **Busson, H., and CH. FABRY.** La lumière ultra-violette. (*Revue général des sciences pures et appliquées*, Paris, v. 22, 1911, p. 309-322.) **OA**
172. **Chauchard, A., and B. MAZOUÉ.** Action des rayons ultraviolets sur l'amylase, l'invertine et le mélange de ces deux diastases. (*Comptes rendus*, Paris, v. 152, June 12, 1911, p. 1709-1711.) ***EO**
173. **Courmont, Jules.** Die Sterilisation des Trinkwassers durch ultraviolette Strahlen. (*Wasser und Abwasser*, Leipzig, v. 4, Nov. 25, 1911, p. 515.) **VDL**
174. ——— (Journal für Gasbeleuchtung und Wasserversorgung, München, v. 54, July 8, 1911, p. 675-678.) **VOA**
175. ——— (*Chemiker-Zeitung*, Cöthen, v. 35, July 22, 1911, p. 806.) **VOA**
176. ——— Sterilization of drinking water by ultra-violet radiations. (*Smithsonian Institution, Report*, Washington, 1911, p. 235-245.) ***EA**
177. **Courmont, Jules, and CH. NOGIER.** Deterioration of quartz lamps. (*Electrical review and western electrician*, Chicago, v. 59, Aug. 26, 1911, p. 426.) **VGA**
178. ——— Diminution progressive du rendement en ultraviolet des lampes en quartz à vapeur de mercure, fonctionnant à haute température. (*Comptes rendus*, Paris, v. 152, June 19, 1911, p. 1746-1747.) ***EO**
179. **Don, John, and JOHN CHISHOLM.** Sterilization by ultra-violet light. (In their: *Modern methods of water purification*, London, 1911, p. 230.) **VDL**
180. Effect of high temperature on the ultra-violet radiation from mercury vapour lamps. (*Illuminating engineer*, London, v. 4, Sept., 1911, p. 503.) **VOKA**
181. Effect of quartz lamps on plants. (*Illuminating engineer*, London, v. 4, June, 1911, p. 376.) **VOKA**
182. **Erlwein, G.** Die Reinigung des Trinkwassers von Bakterien mittels Ozons und ultravioletter Strahlen. (*Chemiker-Zeitung*, Cöthen, v. 35, Dec. 7, 1911, p. 1358.) **VOA**
183. **Euler, H., and H. OHLSEN.** Sur l'inversion de la saccharose dans les rayons ultra-violets. (*Journal de chimie physique*, Genève, v. 9, 1911, p. 416-422.) **PKA**
184. **Grimm, and Weldert.** Sterilisation von Wasser mittels ultra-violetter Strahlen. (*Chemisches Zentralblatt*, Berlin, Folge 5, v. 15, May 10, 1911, p. 1454.) **PKA**
Report on sterilization of water by 1200 candle power mercury vapor lamp.
185. ——— (Journal für Gasbeleuchtung und Wasserversorgung, München, v. 54, July 15, 1911, p. 707.) **VOA**
186. **Guntz, A., and J. MINGUIN.** Contribution à l'étude des radiations ultraviolettes. (*Comptes rendus*, Paris, v. 152, Feb. 13, 1911, p. 372-373.) ***EO**
187. **Helbronner, André, and M. RECKLINGHAUSEN.** Apparatus for sterilizing liquids by means of ultra-violet rays. (English patent, 1911, no. 21,829.) **Patent Room**
188. ——— Appareil pour le traitement des liquides par les rayons ultra-violets. (French patent, 1911, no. 428,170.) **Patent Room**
189. ——— Perfectionnements aux appareils pour les stériliser les liquides au moyen des rayons ultra-violets. (French patent, 1911, no. 434,855.) **Patent Room**
190. **Henri, Victor.** Influence de diverses conditions physiques sur le rayonnement ultraviolet des lampes à vapeur de mercure en quartz. (*Comptes rendus*, Paris, v. 153, Aug. 14, 1911, p. 426-429.) ***EO**
191. **Henri, Victor, and others.** Apparatus for treating liquids with ultra-violet rays. (English patent, 1911, no. 4895.) **Patent Room**
192. ——— Apparatus for treating liquids with ultra-violet rays. (English patent, 1911, no. 8158.) **Patent Room**
193. ——— Perfectionnements aux appareils pour le traitement des liquides par les rayons ultra-violets. (French patent, 1911, no. 425,406.) **Patent Room**
194. **Landau, Marc.** Action des rayons ultraviolets sur l'acide lactique. (*Comptes rendus*, Paris, v. 152, May 15, 1911, p. 1308-1309.) ***EO**
195. **Le Bon, Gustave.** Sur les variations de transparence du quartz pour la lumière ultraviolette, et sur la dissociation de la matière. (*Comptes rendus*, Paris, v. 153, July 3, 1911, p. 49-51.) ***EO**
196. **Massol, L.** Action des radiations ultraviolettes sur l'amidon. (*Comptes rendus*, Paris, v. 152, March 27, 1911, p. 902-904.) ***EO**
197. **Nogier, Thomas.** Apparatus for sterilizing liquids by the action of ultra-violet rays. (English patent 1911, no. 9660.) **Patent Room**
The mercury lamp which is employed is fitted in a casing through which the liquid flows.
198. **Pierce, R. F.** Quartz lamp. (*Illuminating engineer*, New York, v. 6, May, 1911, p. 133-137.) **VOKA**
199. **Pougnét, Jean.** Action des rayons ultraviolets sur les gousses vertes de vanille. (*Comptes rendus*, Paris, v. 152, May 1, 1911, p. 1184-1186.) ***EO**
200. **Pribram, R., and A. FRANKE.** Über Kondensation durch ultraviolettes Licht.



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(Berichte der Deutschen Chemischen Gesellschaft, Berlin, v. 44, 1911, p. 1035-1039.)

PKA

201. **Recklinghausen, Max.** Sterilizing liquids by means of ultra-violet rays. (English patent, 1911, no. 6759.)

Patent Room

The liquid is passed through a quartz helical tube or "worm" which surrounds the lamp emitting the ultra-violet rays.

202. **Remonce, R.** Dispositif pour la stérilisation des liquides par les rayons à faible longueur d'onde. (French patent, 1911, no. 434,784.)

Patent Room

203. **Rochaix, A., and G. COLIN.** Action des rayons émis par la lampe en quartz à vapeurs de mercure sur la colorabilité des bacilles acido-résistants. (Comptes rendus, Paris, v. 153, Dec. 11, 1911, p. 1253.)

*EO

204. **Schwarz, L., and D. AUMANN.** Über Trinkwasserbehandlung mit ultravioletten Strahlen. (Wasser und Abwasser, Leipzig, v. 4, Sept. 2, 1911, p. 320-321.)

VDL

205. — Weitere Mittelung über die Behandlung von Trinkwasser mit ultravioletten Strahlen. (Wasser und Abwasser, Leipzig, v. 4, Nov. 25, 1911, p. 515-516.)

VDL

206. **Sterilization** of water supplies by ultra-violet rays. (Engineer, London, v. 111, June 16, 1911, p. 610-611.)

VA

207. **Stoklasa, Jules, and others.** Über den Einfluss der ultravioletten Strahlen auf die Vegetation. (Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten, Jena, Abteil. 2, v. 31, 1911, p. 477-495.)

QDA

208. **Tian, A.** Sur la décomposition de l'eau par la lumière ultra-violette. (Comptes rendus, Paris, v. 152, April 10, 1911, p. 1012-1014.)

*EO

209. **Triquet, P. G.** Apparatus for sterilizing liquids by means of ultra-violet rays. (English patent, 1911, no. 9047.)

Patent Room

Tubular mercury vapor lamps are fitted in a cylindrical chamber. Various methods of mounting the lamps are described.

210. — Automatic apparatus for the sterilization of water by means of ultra-violet rays. (French patent, 1911, no. 441,457.)

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211. **Ultra-violet light** for sterilization. (Electrical review and western electrician, Chicago, v. 58, June 3, 1911, p. 1091.)

VGA

212. **Ultra-violet light** from the arc. (Electrical review and western electrician, Chicago, v. 58, April 29, 1911, p. 844.)

VGA

213. **Walkey, W. R.** Apparatus for the sterilization of milk, beer, water or other liquids. (English patent, 1911, no. 16,110.)

Patent Room

214. **Water sterilization** by the ultra-violet rays. (Electrical review and western electrician, Chicago, v. 59, Oct. 28, 1911, p. 890.)

VGA

Gives cost data.

215. **Williams, Charles H.** Observations on the effects of the light of the mercury-vapor lamp on the eye. (Electrical world, New York, v. 58, Sept. 2, 1911, p. 550-552.)

VGA

Gives a summary of the results of an ophthalmological examination of a number of persons who have worked for long periods by the mercury arc.

216. **Wood, R. W.** Recent experiments with invisible light. (Smithsonian Institution, Report, Washington, 1911, p. 155-166.)

*EA

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217. **Action** of ultra-violet rays on vegetation. (Scientific American supplement, New York, v. 74, Aug. 17, 1912, p. 111.)

††VA

218. **Anderson, A., and H. N. MORRISON.** On contact difference of potentials, and the action of ultra-violet light. (Philosophical magazine, London, v. 24, Aug., 1912, p. 302-307.)

OA

219. **Berthelot, Daniel.** Les lampes en quartz à vapeur de mercure dans le vide; leur emploi à l'éclairage et à la production de radiations ultraviolettes; leurs altérations lentes ou brusques. (Bulletin de la Société internationale des électriciens, Paris, série 3, tome 2, June, 1912, p. 357-391.)

VGA

Review of experiments with ultra-violet rays.

220. **Berthelot, Daniel, and HENRY GAUDECHON.** Action des rayons ultraviolets sur les carbures d'hydrogène gazeux. (Comptes rendus, Paris, v. 155, 1912, p. 521-522.)

*EO

221. — Décomposition photolytique des poudres sans fumée par les rayons ultraviolets. (Comptes rendus, Paris, v. 154, Jan. 22, 1912, p. 201-203.)

*EO

Abstract in Journal of the Society of Chemical Industry, London, v. 31, 1912, p. 204, *VOA*.

222. — Décomposition photolytique des poudres sans fumée, de l'acide picrique et du picrate d'ammoniaque par les rayons ultraviolets. (Comptes rendus, Paris, v. 154, Feb. 19, 1912, p. 514-517.)

*EO

223. — Sur la photolyse du saccharose par les rayons ultraviolets. (Comptes rendus, Paris, v. 155, 1912, p. 1016-1018.)

*EO

224. — Photolyse des sucres à fonction cétonique par la lumière solaire et par la lumière ultra-violette. (Comptes rendus, Paris, v. 155, 1912, p. 401-403.)

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Abstract in Society of Chemical Industry, Journal, London, v. 31, 1912, p. 847, *VOA*.

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225. **Bielecki, Jan,** and **VICTOR HENRI.** Quantitative Untersuchungen über die Absorption ultra-violetter Strahlen durch Alkohole, Säuren, Ester, Aldehyde und Ketone der Fettreihe. (Deutsche chemische Gesellschaft, Bericht, Berlin, Jahrg. 45, Sept. 28, 1912, p. 2819-2825.) **PKA**
226. **Bielecki, Jan,** and **RENÉ WURMSER.** Action des rayons ultraviolets sur l'amidon. (Comptes rendus, Paris, v. 154, May 28, 1912, p. 1429-1432.) ***EO**
227. — Ueber die Wirkung ultravioletter Strahlen auf Stärke. (Biochemische Zeitschrift, Berlin, v. 43, 1912, p. 154-164.) **PPB**
228. **Coblentz, W. W.** Special energy distribution of neon and helium. (Electrical world, New York, v. 59, Feb. 17, 1912, p. 365-366.) **VGA**
On progress in vacuum tube illuminants.
229. **Craig, C. F.** Photographing with invisible light. (Technical world, Chicago, v. 16, Feb., 1912, p. 699-707.) **VDA**
230. **Effect of illuminants on vegetation and animal life.** (Illuminating engineer, London, v. 5, March, 1912, p. 166.) **VOKA**
231. **Emich, Fr.** Chemische und andere Wirkungen des ultra-violetten Lichtes. (Naturwissenschaftlicher Verein für Steiermark, Mitteilungen, Graz, v. 48, 1912, p. 450-452.) **PQA**
232. **Erlwein, G.** Die Reinigung des Trinkwassers von Bakterien mittelst Ozons und ultravioletter Strahlen. (Wasser und Abwasser, Leipzig, v. 5, Sept. 14, 1912, p. 555-556.) **VDL**
233. **Experiments with the ultra-violet rays.** (Illuminating engineer, London, v. 5, July, 1912, p. 357.) **VOKA**
234. **Girard, F.** The quartz mercury vapour lamp for alternating currents. (Electrical review, London, v. 71, Sept. 20, 1912, p. 443-444.) **VGA**
235. **Henri, Victor,** and **A. RANC.** Décomposition de la glycérine par les rayons ultraviolets. (Comptes rendus, Paris, v. 154, May 6, 1912, p. 1261-1263.) ***EO**
236. **Ives, Herbert E.** Study of the light from the mercury arc. (Electrical world, New York, v. 60, Aug. 10, 1912, p. 304-305.) **VGA**
237. **Ludlam, E. B.** The action of ultra-violet light chlorine. (London, Edinburgh and Dublin philosophical magazine, London, series 6, v. 23, 1912, p. 757-772.) **OA**
238. **Luminescence analysis.** (Scientific American supplement, New York, v. 74, Oct. 19, 1912, p. 253-254.) **††VA**
Describes new test for chemicals with the aid of ultra-violet light.
239. **Marmier, L.** Action des rayons ultra-violets sur l'hyposulfite de sodium. (Comptes rendus, Paris, v. 154, Jan. 2, 1912, p. 32-33.) ***EO**
240. **Massol, L.,** and **FAUCON.** Absorption des radiations ultra-violettes par les alcools saturés de la série grasse. (Société chimique de France, Bulletin, Paris, série 4, v. 11, July 12, 1912, p. 931-935.) **PKA**
241. **Mathews, J. H.,** and **L. H. DEWEY.** A quantitative study of some photochemical effects produced by ultra-violet light. (Eighth International Congress of Applied Chemistry, New York, 1912, Original communications, section 9, photochemistry, v. 20, p. 247-257.) **PKR**
The action of ultra-violet light on solutions of sodium sulphite, potassium permanganate, potassium bichromate and oxalic acid was studied.
242. **Michaud, G.** Curious cases of selective reflection in ultra-violet light. (Science, New York, new series, v. 36, 1912, p. 415-416.) **OA**
243. **Michaud, G.,** and **F. TRISTAN.** How to make an ultra-violet ray objective. (Scientific American, New York, v. 107, Sept. 28, 1912, p. 257.) **††VA**
244. **Miller, Warren H.** French and German quartz tube mercury-vapor lamps. (Electrical world, New York, v. 60, July 27, 1912, p. 197-198.) **VGA**
Describes the design and operation and gives data as to cost and service.
245. **Notes on the quartz mercury vapour lamp.** (Illuminating engineer, London, v. 5, Oct., 1912, p. 469-474.) **VOKA**
246. **Peter, H.** Neuere Sterilisierungsmethoden für grössere Wassermengen, ihre technische und wirtschaftliche Anwendbarkeit. (Journal für Gasbeleuchtung und Wasserversorgung, München, v. 55, July 6, 1912, p. 645-649.) **VOA**
Compares fourteen methods of sterilization, with costs.
247. **Quartz mercury vapour lamp.** (Electrician, London, v. 69, Sept. 20, 1912, p. 994-997.) **VGA**
Gives underlying principles of these lamps.
248. **Rayons ultra-violets et leur applications.** Abbeville: Imprimerie F. Pailard (1912). 63(1) p. 8°. (Mois scientifique et industriel. Bibliothèque pratique. no. 19.)
249. **Recklinghausen, Max,** and others. Perfectionnements aux appareils de stérilisation par les rayons ultra-violets. (French patent, 1912, no. 453,191.) **Patent Room**
250. **Schneckenberg, Erich.** Chemische Sterilisierungs-Schnellproben bei Ozon- und bei Ultraviolet-Wasserwerken. (Jour-

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nal für Gasbeleuchtung und Wasserversorgung, München, v. 55, May 4, 1912, p. 432-433.) VOA

251. **Schultz, L. G.** Weather and the ultra-violet radiations of the sun. (*Nature*, London, v. 90, Sept. 19, 1912, p. 68-70.) OA

252. **Sterilization of water by ultra-violet light.** (*Engineering record*, New York, v. 67, April 19, 1912, p. 429.) VDA

253. **Swetz, Alexander.** Neue Methoden der Trinkwasserreinigung zur Wasserversorgung der Städte. (*Zeitschrift des Oesterreichischen Ingenieur- und Architekten-Vereines*, Wien, v. 64, May 17, 1912, p. 305-310.) VDA

A review of the recent methods discussed at the International Hygiene Congress at Dresden.

254. **Ultra-violet light sterilizer for Austrian army.** (*Scientific American*, New York, v. 107, Dec. 14, 1912, p. 515.) †† VA

255. **Ultra-violet light water sterilization on a large scale.** (*Electrical review and western electrician*, Chicago, v. 60, April 6, 1912, p. 680.) VGA

Test shows process highly efficient for municipal purposes.

256. **Ultra-violet rays.** (*Canadian engineer*, Toronto, v. 22, Jan. 11, 1912, p. 129-132.) VDA

257. **Ultra-violet rays.** (*Engineering magazine*, New York, v. 42, March, 1912, p. 966-968.) VDA

Describes the lamps used in sterilization of water.

258. **Ultra-violet rays for water sterilization.** (*Electrical review and western electrician*, Chicago, v. 61, July 6, 1912, p. 40.) VGA

259. **Violet ray sterilization of drinking water in Chicago.** (*Engineering record*, New York, v. 66, July 27, 1912, p. 110-111.) VDA

Sterilization of 150 gallons per hour of Lake Michigan water by ultra-violet rays for the bottle trade.

260. **Wassersterilisierung durch ultraviolette Strahlen.** (*Journal für Gasbeleuchtung und Wasserversorgung*, München, v. 55, Nov. 16, 1912, p. 1126-1128.) VOA

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